

Cloud Computing hands on AWS, Azure, Google Cloud (CC105)

24 Hours

Outline

Cloud computing is a new form of Internet-based computing that provides shared computer processing resources and data to computers and other devices on demand. Cloud computing has really changed the way companies looking into their digital Infrastructure now a days. And brings new opportunities and challenges for developers and administrators worldwide. This course is surely the fastest and smartest way to get started with Cloud computing technologies. Make the transition to working in the cloud from any device, anywhere, anytime. Unlock the advantages while avoiding the downsides.

Target Audience

This introduction to Cloud computing will help anyone who is in, or getting into professional IT.

System Engineers, DevOps, System Admins, Developers, Architects, Operational, Managers, and CIO's: this course is for you all. If you have previous experience of the cloud, you might learn something about the broadness of the topic.

Prerequisites

- Basic understanding of IT principles.
- Access to the Internet for material linked from the course.

Objectives

The Course will start with introduction to cloud computing technology and concepts like SAAS, PAAS and IAAS.

You will learn how to operate, deploy and create cloud computing infrastructure on Linux and Windows systems, Virtual Networking, Containers and more.

You will then learn to use popular cloud technologies like Amazon Web Services, Microsoft Azure and Google Compute Engine.

You will be Able to Manage, Monitor and apply security Policies to your cloud computing environment.

You will be able to understand the wide range of options for developing and deploying applications for the Web and Mobile.

Contents

Day 1

Module 1 – Cloud Computing Technologies Introduction - 02 Hours

- What is cloud computing?
- Motivation for Cloud Computing
 - Variable expense
 - Benefit economies of scale
 - Capacity utilization
 - No data centers management
 - Global
- Cloud Computing models:
 - SaaS
 - PaaS
 - IaaS

- Cloud implementation models:
 - Public
 - Private
 - Hybrid
- Major cloud vendors overview: Amazon, Microsoft, Google and others

Module 2 - Amazon Web Services (AWS) – 06 Hours

- What is AWS?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network (VPC)
- Security & Identity
- Management (monitoring, configuration management)
- Analytics (emr, ml, kinesis)
- Diving into Compute & Storage
 - Regions, Availability Zones, ELB (load balancer), EBS (storage), AMI (images)
 - VPC, subnets, security groups, auto-scaling
 - S3
 - Containers
- Monitoring
- Automation
- Mobile Hub
- Development Tools
- Console
- CLI
- SDKs
- Summary

Day 2

Module 3 - Microsoft Azure – 08 Hours

- What's Azure?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network
 - Security
 - Management
 - Analytics

- Diving into Compute & Storage

- Virtual machines, Load balancers
 - Virtual network
 - Storage
 - Container service

- Azure Functions
- Monitoring
- Automation
- App services
 - Development Model

- SDK
- IDE tools (Visual Studio)
- Summary

Day 3

Module 4 - Google Cloud – 08 Hours

- What's Google Cloud?
- Main services overview
 - Compute
 - Storage
 - DB
 - Network
 - Security
 - Management
 - Analytics

- Diving into Compute & Storage
 - Virtual machines, Load balancers
 - Networks
 - App Engine
 - Storage
 - Containers

- Cloud Functions
- Monitoring
- Automation
- Development Model
- SDK
- IDE tools
- CLI
- Summary